ABSTRACT OF THE DISCLOSURE

A reduced dimensionality eigenvoice analytical technique is used during training to develop context-dependent acoustic models for allophones. Re-estimation processes are performed to more strongly separate speaker-dependent and speaker-independent components of the speech model. The eigenvoice technique is also used during run time upon the speech of a new speaker. The technique removes individual speaker idiosyncrasies, to produce more universally applicable and robust allophone models. In one embodiment the eigenvoice technique is used to identify the centroid of each speaker, which may then be "subtracted out" of the recognition equation.